

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G11B7/125 G11B20/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 182 651 A (RICOH COMPANY, LTD) 27 February 2002 (2002-02-27) paragraph '0002! - paragraph '0019! paragraph '0082! - paragraph '0118! paragraph '0148! - paragraph '0217! -----	1-6
X	US 2002/024903 A1 (SATO SHINICHI) 28 February 2002 (2002-02-28) paragraph '0001! - paragraph '0014! paragraph '0048! - paragraph '0066! paragraph '0074! - paragraph '0080! paragraph '0088! - paragraph '0096! -----	1-6
X	US 2003/086346 A1 (FUKUMOTO MAKOTO) 8 May 2003 (2003-05-08)	1,3
A	paragraph '0001! - paragraph '0010! paragraph '0026! - paragraph '0047! ----- -/--	2,4-6

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

6 April 2005

Date of mailing of the international search report

04/05/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Skaropoulos, N

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 835 462 A (MIMNAGH ET AL) 10 November 1998 (1998-11-10)	5,6
A	the whole document	1-4
X	EP 0 642 128 A (PIONEER ELECTRONIC CORPORATION; PIONEER VIDEO CORPORATION) 8 March 1995 (1995-03-08)	1,3
A	the whole document	2,4-6
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 07, 3 July 2003 (2003-07-03) -& JP 2003 085761 A (RICOH CO LTD), 20 March 2003 (2003-03-20)	1-4
A	the whole document	5,6

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1182651	A	27-02-2002	JP	2002056533 A	22-02-2002
			JP	3532152 B2	31-05-2004
			JP	2002170237 A	14-06-2002
			EP	1182651 A2	27-02-2002
			US	2002044507 A1	18-04-2002

US 2002024903	A1	28-02-2002	JP	2001344754 A	14-12-2001
			US	2003185123 A1	02-10-2003

US 2003086346	A1	08-05-2003	JP	2003141728 A	16-05-2003

US 5835462	A	10-11-1998	BE	1009677 A3	03-06-1997
			AT	184416 T	15-09-1999
			CA	2206297 A1	10-04-1997
			CN	1475991 A	18-02-2004
			CN	1182497 A ,C	20-05-1998
			CZ	9701610 A3	14-04-1999
			DE	69604189 D1	14-10-1999
			DE	69604189 T2	13-04-2000
			EP	0852796 A1	15-07-1998
			ES	2138831 T3	16-01-2000
			GR	3031923 T3	31-03-2000
			HK	1012520 A1	12-05-2000
			WO	9713244 A1	10-04-1997
			ID	16343 A	25-09-1997
			JP	11513521 T	16-11-1999
			TW	397974 B	11-07-2000

EP 0642128	A	08-03-1995	JP	7073471 A	17-03-1995
			DE	69416472 D1	25-03-1999
			DE	69416472 T2	19-08-1999
			EP	0642128 A1	08-03-1995
			US	5592463 A	07-01-1997

JP 2003085761	A	20-03-2003	NONE		
